

# Opening Statement By Chairman Mark Udall (D-CO)

Good morning. I'd like to begin by welcoming all of our witnesses to today's hearing. We have a distinguished panel that can provide this subcommittee with important perspectives on the state of NASA's space science activities. In particular, I would like to welcome Dr. Alan Stern, the new Associate Administrator of NASA's Science Mission Directorate. I got to know Dr. Stern a bit when he was at the Southwest Research Institute, and I look forward to working with him in his new role.

I'd also like to welcome Dr. Dan Baker, director of the University of Colorado's Laboratory for Atmospheric and Space Physics in Boulder, Colorado.

As can be seen by the title of today's hearing, we are going to focus on a subset of NASA's science activities, namely its astrophysics, planetary science, and heliophysics programs.

Obviously, NASA's Earth Science program is an important element of NASA's overall science program, but it will be the focus of a separate hearing that will expand on the full committee hearing we held earlier this year.

In addition, while not currently part of the Science Mission Directorate, NASA's life and microgravity research programs are also important research endeavors that will be scrutinized by this Subcommittee in the coming months, particularly in light of the deep—and many would say unwise—cuts that NASA has made to those programs.

To paraphrase Dickens, it is both "*the best of times and the worst of times*" for NASA's space science programs. We have witnessed a whole series of exciting events in recent months, whether it be the discovery of possible recent liquid water flows on Mars, stereo images of solar activity, or Nobel prizes awarded for research enabled by NASA's Cosmic Background Explorer.

Those are just a few of the accomplishments of NASA's space science enterprise over the past several years. In short, NASA's space science programs are highly productive, exciting, and addressing compelling scientific questions.

That's the good news...what's the bad news? The bad news is that while those accomplishments were enabled by the nation's past investments in NASA's science activities, the outlook for the needed future investments is not good if present trends are any indication.

For example, the five-year funding plan for NASA's Science Mission Directorate has been reduced by a total of \$4 billion since Fiscal Year 2005—a significant disruption.

In addition, the impact of those cuts to NASA's outyear science funding is magnified by cost growth that has occurred within some science missions under development—cost growth that is putting additional stress on the overall space science program.

Another example: the Explorer program, which has enabled major scientific discoveries, has seen new mission opportunities dramatically curtailed.

Funding for Research and Analysis, which helps to enable scientific research and train the next generation of scientists and engineers, was cut by an average of 15 percent in FY 2007.

Those cuts were also applied retroactively to FY 2006 and that reduced R&A funding level was maintained in the FY 2008 request.

Moreover, that 15 percent R&A cut was an average cut, with some disciplines suffering much deeper cuts.

In short, at a time when NASA's science programs offer the promise of major advances in our understanding of the sun, our solar system, and the universe beyond, we risk doing long-term damage to the health of those programs if we are not careful.

That is why I look forward to hearing from Dr. Stern and the rest of our expert panel today.

We need to get their best assessment of the challenges facing NASA's space science program and the likely consequences of inaction, and most importantly, their recommendations for addressing those challenges.

At the end of the day, however, it is clear to me that if we are going to ask our nation's space science program to undertake challenging and meaningful initiatives, we are going to need to provide the necessary resources.

In closing, I again want to welcome our witnesses, and I now yield to my colleague, Ranking Member Calvert, for any opening remarks he would like to make.